

iBOTTM 2

USB 2.0 Web Cam

Operators Manual



 **Orange Micro[®]**
inc.
<http://www.orangemicro.com>

About this manual

The information in this manual is subject to change without notice. We welcome your comments on any area of Orange Micro products or services. Please send your comments to:

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Package Contents

- iBOT2 USB 2.0 Web Cam w/6 foot attached cable and USB Type A connector
- iBOT2 Installation Software, Manual and Software CD-ROM
- USB 2.0 PCI Host Controller add-in card (optional)
- Quickstart Card



Software Included

- Apple QuickTime for Windows
- ArcSoft PhotoImpression for Windows (photo editing application)
- ArcSoft VideoImpression for Windows (video editing application)
- iVisit for Windows (video conferencing software)
- Microsoft NetMeeting (video conferencing software)
- TeVeo Suite (stream live video to the web)

System Requirements

Hardware

- 400 MHz or above Intel Pentium compatible with an available PCI slot
- iBOT2 requires one available USB 2.0 Port supplying at least 5v 500mA of power
- 64 MB System RAM
- 200 MB free hard drive space
- CD-ROM drive (for software installation)

Operating System

- Windows 98SE, Me, 2000 or XP

Chapter 1

Introduction

What is iBOT2?

Orange Micro is first to market the iBOT2, a USB 2.0-based desktop video camera. iBOT2 harnesses the speed and power of USB 2.0 technology unmatched by the slower USB 1.1-based web cams. Orange Micro's iBOT2 is the desktop video camera for the rest of us, providing crisp, clear video at a price you can afford.

What is USB 2.0?

USB 2.0 technology extends the speed of the USB connection from 12 Mbps on USB 1.1 up to 480 Mbps on USB 2.0, providing an attachment point for next-generation peripherals which complement higher performance PCs and user applications. USB 2.0 is both forward and backward compatible with USB 1.1, resulting in a seamless transition process for the end user. In fact, USB 2.0 uses the same cables and connectors as USB 1.1.

iBOT2 Features

Exclusive USB 2.0 Speed and Clarity

With a data transfer rate that's 4000% times faster than traditional USB 1.1 web cams, you'll experience a Video Frame Rate of 30 frames/second. And that's with a big 640 x 480 image size in living color.

Create, Edit and Retouch Photos

Create, edit and retouch your photos, then add special effects or place them in cards, calendars, frames and templates.

Polish Your Presentations

With clarity only iBOT2 can provide, you can record and save super-crisp video in your home or office. Spice up important presentations with film clips. Hone your persuasion skills with instant video feedback.

Affordable Movie Making

iBOT2 can make you a star! Record special family events, such as Christmas, Thanksgiving dinner, or even just everyday life. Produce your own documentaries. The iBOT2's 480 Mb/s data transfer speed lets you easily input, edit, and show-off movies with pride.

Video Teleconferencing for the Internet

With Microsoft NetMeeting, you can talk to anyone, face-to-face, via the Internet, with a whole new level of clarity. Whether it's the grandparents, relatives, or old friends you haven't seen, only iBOT2 provides quality video conferencing unmatched by older USB 1.1 web cams.

Video E-Mail

Attach super-clear video clips to your email for a whole new dimension of communication. Show off brand-new additions to your family immediately! Send video greetings from Fiji! Keep the people you love updated on what you're up to.

Installation Overview

In order to ensure proper operation of your iBOT2, it is important to install the hardware and software in the following order.

- Install the OrangeUSB 2.0 Hi-Speed drivers
- Install the USB 2.0 PCI Host Controller board
- Install the iBOT2 drivers
- Attach the iBOT2 camera to the USB 2.0 PCI Host Controller
- Install remaining software as needed

Chapter 2

How to install the USB 2.0 PCI Host Controller card

Orange Micro USB 2.0 PCI Host Controller may be used on any Windows compatible system running Microsoft Windows 98, SE, Me, 2000 or Windows XP.

In order to ensure proper operation of your USB 2.0 Host Controller card, please follow the instructions in the order they appear. Refer to the section below that represents the Operating system you have installed in your computer..

Note: Do not install USB 2.0 PCI Host Controller Board before installing OrangeUSB drivers in Windows.

Installing OrangeUSB 2.0 Hi-Speed Drivers in Windows Me

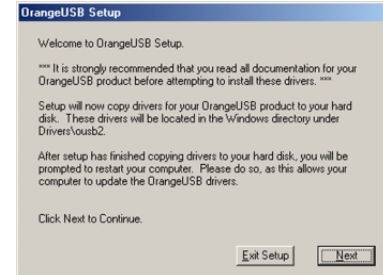
Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install OrangeUSB Drivers"
- Follow the onscreen instructions.
- The OrangeUSB 2.0 drivers will be copied to: C:\windows\drivers\usb2\



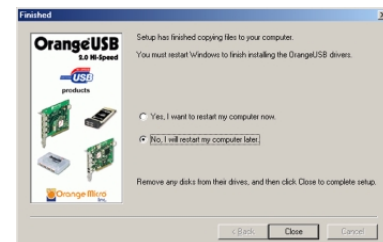
Step 2

- The OrangeUSB Setup dialog to the right will appear. Click "Next." To continue.
- Another OrangeUSB Setup dialog will appear. Click "Finish" to continue.
- The iBOT2 Setup dialog, as displayed in Step 1 above, will appear. Click on the box next to the "Exit Setup".



Step 3

- When Setup has finished, select "No, I will restart my computer".
- Click on the Close button,
- Shutdown Windows Me and install the USB 2.0 PCI Host Controller board.



NOTES: Refer to your computer's manual for instructions on how to open your computer and install a PCI card.

IMPORTANT: Before handling the PCI board or touching anything in the computer ground yourself by touching the power supply for a couple of seconds. Failure to do this may damage the board and/or your computer.

Step 4

- With your computer off, open your computer case.
- Locate an open PCI slot. If there is a faceplate covering the opening to the back panel, remove it.
- Locate the USB 2.0 PCI Host Controller board and insert it into the free slot. Once inserted, screw the board in securely.
- Connect your internal devices as needed.
- Close computer.
- Turn the computer power on.



Step 5

Once the OrangeUSB card is installed and the computer is restarted, all necessary USB drivers will be detected and installed automatically.

- Restart Windows to activate the drivers.
- Congratulations your OrangeUSB driver installation is complete!

Finalizing USB 2.0 Hi-Speed hardware settings

OrangeUSB 2.0 Hi-Speed products that use an NEC chipset have 3 USB host controller engines on board. Two of the host controller engines handle USB 1.1 transactions. One of the host controllers engines handle, USB 2.0 transactions.

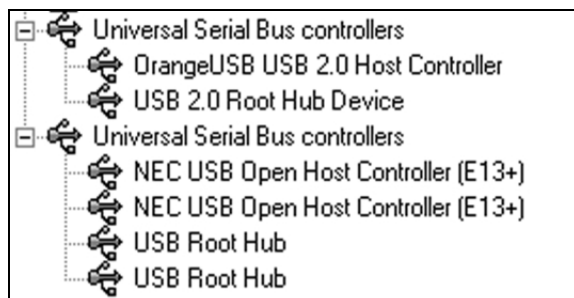
USB data traffic is automatically routed to the proper host controller engine depending on the speed of the device that is plugged into the OrangeUSB port. This essentially creates 3 concurrent USB buses. These USB buses allow devices to run in a less congested traffic environment. This helps devices such as color printers, scanners, video cameras and mass storage devices, which require a high bandwidth, to work well together.

The OrangeUSB USB 2.0 Host Controller driver handles USB 2.0 Hi-Speed (480 Mbits/s) traffic. The two NEC USB Open Host Controllers handle Full-Speed (12 Mb/s) and Low-Speed (1.5 Mb/s) traffic.

Check your Windows System/Device Manager to confirm proper installation of USB 2.0 Hi-Speed drivers:

Right click on the "My Computer" icon. Select **Properties** from the pop up menu, then click on the "Device Manager" tab. Scroll down to the "Universal Serial Bus controllers" category and click on the plus sign next to it. There may be additional devices in the list being displayed, but all of the below devices should appear.

An X through a device's icon means the device as been disabled. A circled exclamation point through the device's icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.



Installing OrangeUSB 2.0 Hi-Speed Drivers in Windows 2000

Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install OrangeUSB Drivers"
- Follow the onscreen instructions.
- The OrangeUSB 2.0 drivers will be copied to: C:\winnt\drivers\ousb2\



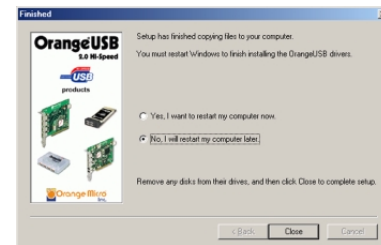
Step 2

- The OrangeUSB Setup dialog to the right will appear. Click "Next." To continue.
- Another OrangeUSB Setup dialog will appear. Click "Finish" to continue.
- The iBOT2 Setup dialog, as displayed in Step 1 above, will appear. Click on the box next to the "Exit Setup".



Step 3

- When Setup has finished, select "No, I will restart my computer".
- Click on the Close button,
- Shutdown Windows 2000 and install the USB 2.0 PCI Host Controller board.



NOTES: Refer to your computer's manual for instructions on how to open your computer and install a PCI card.

IMPORTANT: Before handling the PCI board or touching anything in the computer ground yourself by touching the power supply for a couple of seconds. Failure to do this may damage the board and/or your computer.

Step 4

- With your computer off, open your computer case.
- Locate an open PCI slot. If there is a faceplate covering the opening to the back panel, remove it.
- Locate the USB 2.0 PCI Host Controller board and insert it into the free slot. Once inserted, screw the board in securely.
- Connect your internal devices as needed.
- Close computer.
- Turn the computer power on.



Step 5

Once the OrangeUSB card is installed and the computer is restarted, all necessary USB drivers will be detected and installed automatically.

- Restart Windows to activate the drivers.
- Congratulations your OrangeUSB driver installation is complete!

Finalizing USB 2.0 Hi-Speed hardware settings

OrangeUSB 2.0 Hi-Speed products that use an NEC chipset have 3 USB host controller engines on board. Two of the host controller engines handle USB 1.1 transactions. One of the host controllers engines handle, USB 2.0 transactions.

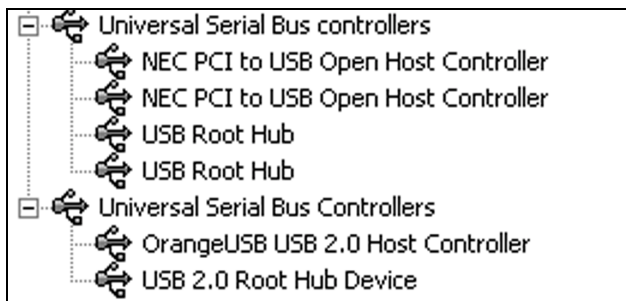
USB data traffic is automatically routed to the proper host controller engine depending on the speed of the device that is plugged into the OrangeUSB port. This essentially creates 3 concurrent USB buses. These USB buses allow devices to run in a less congested traffic environment. This helps devices such as color printers, scanners, video cameras and mass storage devices, which require a high bandwidth, to work well together.

The OrangeUSB USB 2.0 Host Controller driver handles USB 2.0 Hi-Speed (480 Mbits/s) traffic. The two NEC USB Open Host Controllers handle Full-Speed (12 Mb/s) and Low-Speed (1.5 Mb/s) traffic.

Check your Windows System/Device Manager to confirm proper installation of USB 2.0 Hi-Speed drivers:

Right click on the “My Computer” icon. Select **Properties** from the pop up menu, click on the “Hardware” tab then click on the Device Manager button. Scroll down to the “Universal Serial Bus controllers” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but all of the below devices should appear.

An X through a device’s icon means the device as been disabled. A circled exclamation point through the device’s icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.



Installing OrangeUSB 2.0 Hi-Speed Drivers in Windows XP

Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install OrangeUSB Drivers"
- Follow the onscreen instructions.
- The OrangeUSB 2.0 drivers will be copied to: C:\windows\drivers\ousb2\



Step 2

- The OrangeUSB Setup dialog to the right will appear. Click "Next." To continue
- Another OrangeUSB Setup dialog will appear. Click "Finish" to continue.
- The iBOT2 Setup dialog, as displayed in Step 1 above, will appear. Click on the box next to the "Exit Setup".



Step 3

- When Setup has finished, select "No, I will restart my computer".
- Click on the Close button,
- Shutdown Windows XP and install the USB 2.0 PCI Host Controller board.



NOTES: Refer to your computer's manual for instructions on how to open your computer and install a PCI card.

IMPORTANT: Before handling the PCI board or touching anything in the computer ground yourself by touching the power supply for a couple of seconds. Failure to do this may damage the board and/or your computer.

Step 4

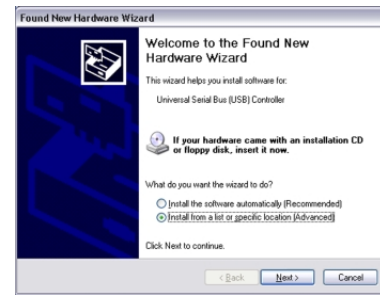
- With your computer off, open your computer case.
- Locate an open PCI slot. If there is a faceplate covering the opening to the back panel, remove it.
- Locate the USB 2.0 PCI Host Controller board and insert it into the free slot. Once inserted, screw the board in securely.
- Connect your internal devices as needed.
- Close computer.
- Turn the computer power on.



Step 5

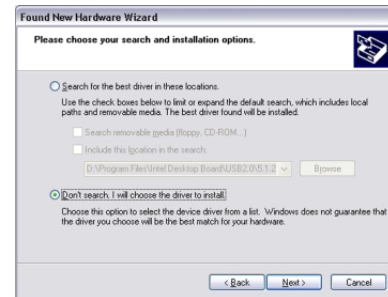
Once the OrangeUSB card is installed and the computer is restarted,

- Windows will detect “Universal Serial Bus (USB) Controller”.
- Select “Install from a list or specific location”
- Click Next to continue.



Step 6

- The Windows “choose you search and installation options” dialog appears.
- Select “Don’t search, I will choose the driver to install”.
- Click Next to continue.



Step 7

- The Windows “Select the device driver you want to install” dialog appears.
- Select “OrangeUSB USB 2.0 Host Controller”.
- Click Next to continue



Step 8

- The Windows “wizard has finished installing the software” dialog appears.
- Click “Finish” to continue



Step 9

- Windows will detect “USB 2.0 Root Hub Device”.
- Select “Install the software automatically”
- Click “Next” to continue



Step 10

- The Windows “wizard has finished installing the software” dialog appears.
- Click “Finish” to continue



Finalizing USB 2.0 Hi-Speed hardware settings

OrangeUSB 2.0 Hi-Speed products that use an NEC chipset have 3 USB host controller engines on board. Two of the host controller engines handle USB 1.1 transactions. One of the host controllers engines handle, USB 2.0 transactions.

USB data traffic is automatically routed to the proper host controller engine depending on the speed of the device that is plugged into the OrangeUSB port. This essentially creates 3 concurrent USB buses. These USB buses allow devices to run in a less congested traffic environment. This helps devices such as color printers, scanners, video cameras and mass storage devices, which require a high bandwidth, to work well together.

The OrangeUSB USB 2.0 Host Controller driver handles USB 2.0 Hi-Speed (480 Mbits/s) traffic. The two NEC USB Open Host Controllers handle Full-Speed (12 Mb/s) and Low-Speed (1.5 Mb/s) traffic.

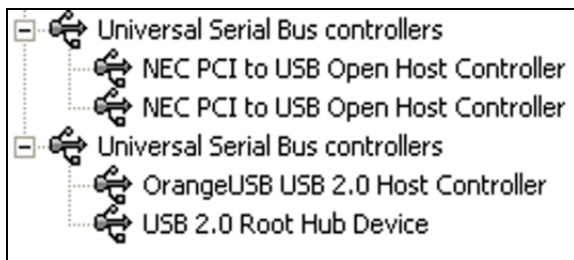
Check your Windows System/Device Manager to confirm proper installation of USB 2.0 Hi-Speed drivers:

Right click on the “My Computer” icon. Select **Properties** from the pop up menu, click on the “Hardware” tab then click on the Device Manager button. Scroll down to the “Universal Serial Bus controllers” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but all of the below devices should appear.

An X through a device’s icon means the device as been disabled. A circled exclamation point through the device’s icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.

If the Windows XP Device Manager “Universal Serial Bus controllers” category does not look the same as it does below, Windows XP may have installed the Microsoft NEC PCI to USB Enhanced Host Controller instead of the OrangeUSB USB 2.0 Host Controller. This will work fine as long as the NEC PCI to USB Enhanced Host Controller (Driver Date 6/1/2002) is from Windows XP Service Pack 1.

NOTES: To verify the NEC PCI to USB Enhanced Host Controller driver date, double click on it. Select the **Driver** tab. The NEC PCI to USB Enhanced Host Controller driver date must be 6/1/2002 or newer.



If you wish to use the OrangeUSB USB 2.0 drivers instead of the Microsoft USB 2.0 driver, double click on the “NEC PCI to USB Enhanced Host Controller” driver. Click on the Driver tab, then the Update Driver button. Go back to Step 5 in the Installing OrangeUSB 2.0 Hi-Speed Driver in Windows XP section and follow the instructions through Step 12.

Installing OrangeUSB 2.0 Hi-Speed Drivers in Windows 98

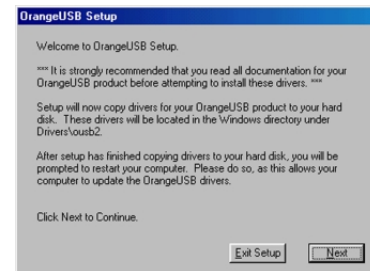
Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install OrangeUSB Drivers"
- Follow the onscreen instructions.
- The OrangeUSB 2.0 drivers will be copied to: C:\windows\drivers\usb2\



Step 2

- Insert your Microsoft Windows 98 CD-ROM into your CD-ROM bay. Some of the USB drivers are provided by Microsoft.
- The OrangeUSB Setup dialog to the right will appear. Click "Next." To continue
- Another OrangeUSB Setup dialog will appear. Click "Finish" to continue.
- The iBOT2 Setup dialog, as displayed in Step 1 above, will appear. Click on the box next to the "Exit Setup".



Step 3

- When Setup has finished, select "No, I will restart my computer".
- Click on the Close button,
- Shutdown Windows 98 and install the USB 2.0 PCI Host Controller board.



NOTE: Refer to your computer's manual for instructions on how to open your computer and install a PCI card.

IMPORTANT: Before handling the PCI board or touching anything in the computer ground yourself by touching the power supply for a couple of seconds. Failure to do this may damage the board and/or your computer.

Step 4

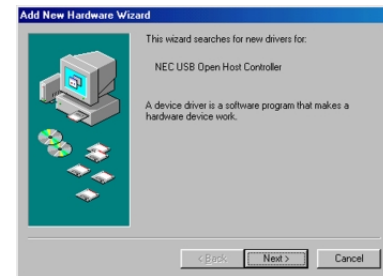
- With your computer off, open your computer case.
- Locate an open PCI slot. If there is a faceplate covering the opening to the back panel, remove it.
- Locate the USB 2.0 PCI Host Controller board and insert it into the free slot. Once inserted, screw the board in securely.
- Connect your internal devices as needed.
- Close computer.
- Turn the computer power on.



Step 5

Once the OrangeUSB card is installed and the computer is restarted,

- Windows will detect “NEC USB Open Host Controller”.
- The “This wizard searches for new driver for:” dialog appears.
- Click Next to continue



Step 6

- The “What do you want Windows to do?” dialog appears.
- Select “Search for the best driver for your device”.
- Click Next to continue.



Step 7

- The “Window will search for new drivers” dialog appears.
- Deselect all check boxes.
- Click Next to continue.



Step 8

- The “Windows has found an update driver for this device” dialog appears.
- Select “The updated driver (Recommended) NEC USB Open Host Controller”
- Click Next to continue



Step 9

- The “Windows driver file search for the device” dialog appears.
- Click Next to continue.



Step 10

- The “Windows has finished installing the software” dialog appears.
- Click Finish to continue
- Repeat steps 4 through step 9 above
- Restart Windows



Congratulations your OrangeUSB driver installation is complete!

Finalizing USB 2.0 Hi-Speed hardware settings

OrangeUSB 2.0 Hi-Speed products that use an NEC chipset have 3 USB host controller engines on board. Two of the host controller engines handle USB 1.1 transactions. One of the host controllers engines handle, USB 2.0 transactions.

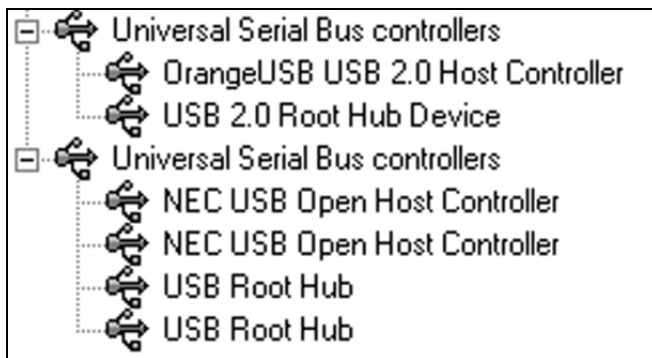
USB data traffic is automatically routed to the proper host controller engine depending on the speed of the device that is plugged into the OrangeUSB port. This essentially creates 3 concurrent USB buses. These USB buses allow devices to run in a less congested traffic environment. This helps devices such as color printers, scanners, video cameras and mass storage devices, which require a high bandwidth, to work well together.

The OrangeUSB USB 2.0 Host Controller driver handles USB 2.0 Hi-Speed (480 Mbits/s) traffic. The two NEC USB Open Host Controllers handle Full-Speed (12 Mb/s) and Low-Speed (1.5 Mb/s) traffic.

Check your Windows System/Device Manager to confirm proper installation of USB 2.0 Hi-Speed drivers:

Right click on the “My Computer” icon. Select Properties from the pop up menu, then click on the “Device Manager” tab. Scroll down to the “Universal Serial Bus controllers” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but all of the below devices should appear.

An X through a device's icon means the device as been disabled. A circled exclamation point through the device's icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.



Where to go for additional Troubleshooting assistance?

Visit the OrangeUSB Windows troubleshooting web site.
<http://www.orangemicro.com/orangeusbwinfaqs.html>

Contact Orange Micro for technical support.
<http://www.orangemicro.com/supportform.html>

Chapter 3

How to install the iBOT2

In order to ensure proper operation of your iBOT2, please follow the instructions below in the order they appear. These instructions document the installation process for the iBOT2 on your Windows PC.

The Orange Micro iBOT2 USB 2.0 Web Cam may be used on any Windows compatible system with an available USB 2.0 port.

NOTE: NON-ORANGE MICRO USB 2.0 HOST CONTROLLERS: The Orange Micro USB 2.0 drivers are compatible with all known USB 2.0 Host controllers. It is recommended that you install the Orange Micro USB 2.0 Host controller drivers. Double click on the USB 2.0 Enhanced Host Controller in your Windows System Device Manager. Select the Driver tab and click on Update Drivers to begin the USB 2.0 driver update.

Installing iBOT2 Drivers in Windows 98SE, Me, 2000

Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install iBOT2 Drivers". The iBOT2 drivers will be copied to:
Windows 98SE, Me
C:\windows\drivers\ibot2\
Windows 2000
C:\winnt\drivers\ibot2\
- Follow the onscreen instructions. The iBOT2 Setup dialog will appear. Click on the box next to the "Exit Setup".
- When prompted, restart your computer.



Step 2

- Connect the iBOT2 Camera to an available USB 2.0 port. Windows will detect the iBOT2 camera, then automatically install all necessary drivers.
- Restart Windows.

Verify the proper installation of the iBOT2 Drivers

Windows 98SE, Me

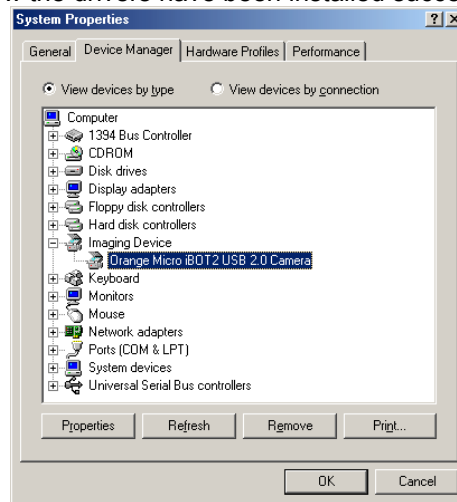
Right click on the “My Computer” icon. Select **Properties** from the pop up menu, then click on the “Device Manager” tab. Scroll down to the “Imaging Device” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but the “Orange Micro iBOT2 USB 2.0 Camera” should appear.

Windows 2000

Right click on the “My Computer” icon. Select **Properties** from the pop up menu, click on the “Hardware” tab then the Device Manager button. Scroll down to the “Imaging Device” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but the “Orange Micro iBOT2 USB 2.0 Camera” should appear.

An X through a device’s icon means the device as been disabled. A circled exclamation point through the device’s icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.

If the Orange Micro iBOT2 driver shows up as displayed below the drivers have been installed successfully.



Use the AMCAP application to verify the iBOT2 functions properly. Click on the Windows Start/Programs menu and select “Orange Micro iBOT”/AMCAP. Pull down the AMCAP “Options” menu and select Preview. A video stream should appear from your iBOT2 camera.

If you wish to adjust the brightness, pull down the AMCAP “Options” menu and select “Video Capture Filter...”. Then slide the brightness bar with your mouse to the desired position.

NOTE: A Tripod mount is located on the bottom of the iBOT2 Web Cam.

Congratulations! You have successfully installed the iBOT2 on your PC.

Additional software is included with the iBOT2 for video editing, video teleconferencing, etc. Documentation may be provided in Adobe Acrobat Reader format or as online help within the application.

Installing iBOT2 Drivers in Windows XP

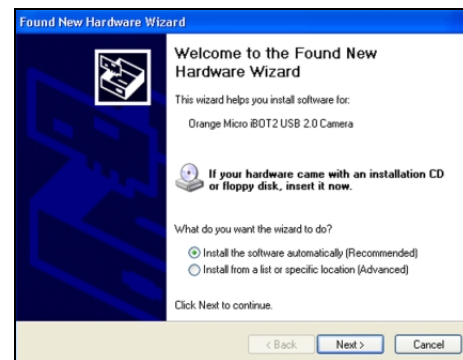
Step 1

- Insert the iBOT2 Installer CD. Once inserted, the iBOT2 Installer will automatically start and display the menu to the right.
- Click on "Install iBOT2 Drivers". The iBOT2 drivers will be copied to:
C:\windows\drivers\ibot2\
- Follow the onscreen instructions. The iBOT2 Setup dialog will appear. Click on the box next to the "Exit Setup".
- When prompted, restart your computer.



Step 2

- Connect the iBOT2 Camera to an available USB 2.0 port. Windows will detect the iBOT2 camera. The dialog to the right will appear.
- Select "Install the software automatically (Recommended)"
- Click Next to continue



Step 3

- The dialog "The software you are installing for this hardware has not passed Windows Logo testing" appears.
- Click Continue Anyway,

NOTE: The warning appears because the software drivers have not yet been submitted to Microsoft for certification. However, the drivers have been thoroughly tested with Windows XP



Step 4

- The dialog "Completing the Found New Hardware Wizard" appears.
- Click Finish to close the wizard
- Restart Windows



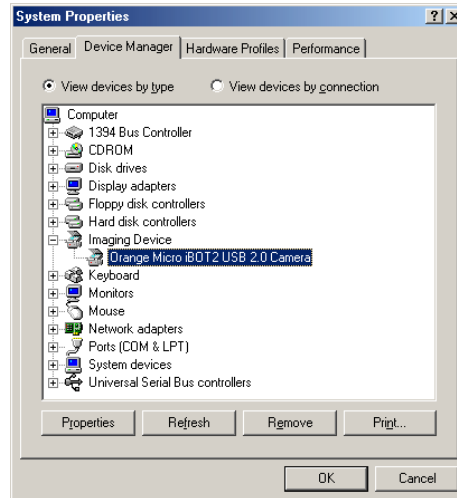
Verify the proper installation of the iBOT2 Drivers

Windows XP

Right click on the “My Computer” icon. Select **Properties** from the pop up menu, click on the “Hardware” tab then the Device Manager button. Scroll down to the “Imaging Device” category and click on the plus sign next to it. There may be additional devices in the list being displayed, but the “Orange Micro iBOT2 USB 2.0 Camera” should appear.

An X through a device’s icon means the device as been disabled. A circled exclamation point through the device's icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.

If the Orange Micro iBOT2 driver shows up as displayed below the drivers have been installed successfully.



Use the AMCAP application to verify the iBOT2 functions properly. Click on the Windows Start/Programs menu and select “Orange Micro iBOT”/AMCAP. Pull down the AMCAP “Options” menu and select Preview. A video stream should appear from your iBOT2 camera.

If you wish to adjust the brightness, pull down the AMCAP “Options” menu and select “Video Capture Filter...”. Then slide the brightness bar with your mouse to the desired position.

NOTE: A Tripod mount is located on the bottom of the iBOT2 Web Cam.

Congratulations! You have successfully installed the iBOT2 on your PC.

Additional software is included with the iBOT2 for video editing, video teleconferencing, etc. Documentation may be provided in Adobe Acrobat Reader format or as online help within the application.

Where to go for additional Troubleshooting assistance?

Visit the iBOT Windows troubleshooting web site.
<http://www.orangemicro.com/faqs.html>

Contact Orange Micro for technical support.
<http://www.orangemicro.com/supportform.html>

ArcSoft Camera Suite

- Insert the iBOT2 Installer CD.
- Once the iBOT2 Installer window has opened, click on the box next to “Install ArcSoft Camera Suite and follow the prompts to complete the ArcSoft Camera Suite installation.
- When the iBOT2 Installer window reappears, click on the box next to Exit Setup.

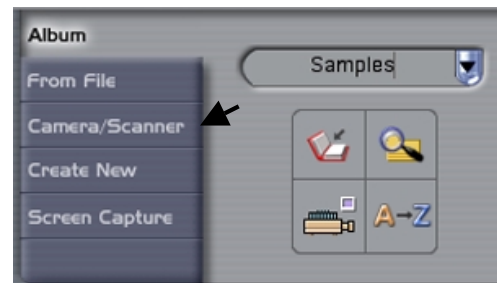
PhotoImpression

PhotoImpression is a full-featured and easy-to-use 32-bit photo image editing program.

Getting Started with PhotoImpression

Click on the Windows Start button then select Programs/ArcSoft Camera Suite/PhotoImpression.

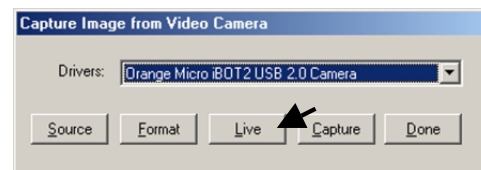
- Click on the Camera/Scanner button.



- Click on the Video Camera icon as shown on the right.



- The “Capture Image from Video Camera” dialog will appear.
- This dialog will allow you to verify the video source, alter the video format, initiate live preview and capture a photo.
- To preview iBOT2 video, click on the Live button



- For additional details on the operation of PhotoImpression review the online help by clicking on the ? as shown on the right.



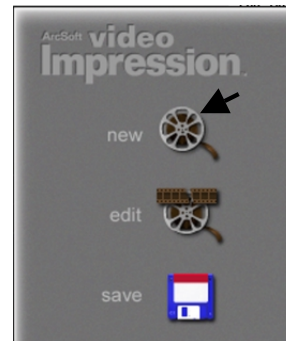
Videolmpression

With Videolmpression you can edit and combine your video files. New videos can be created using existing video, animation, and image files. Quickly and easily create desktop video presentations for use at home, business or on the Internet.

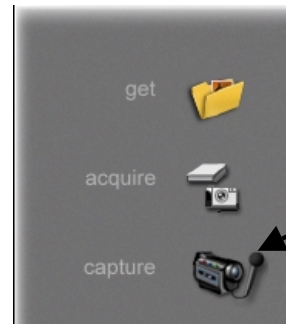
Getting Started with Videolmpression

Click on the Windows Start button then select Programs/ArcSoft Camera Suite/ArcSoft Videolmpression.

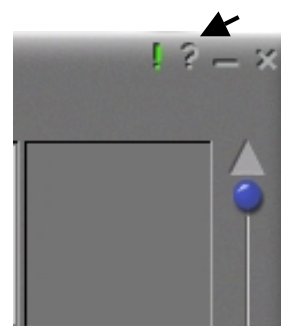
- To create a new video project click on the New Project button as shown on the right to go to the Album Screen



- To preview iBOT2 video, click on the Capture Button as shown on the right.
- The Videolmpression Capture window will appear.
- Use the Capture window to add live video clips or your album.



- For details on editing video and making movies with your video clips and photos review the online help by clicking on the ? as shown on the right.



iVisit

iVisit is a cross platform Internet communications solution providing you with basic Video Conferencing capabilities.

Versions are available for Macintosh OS 9 or Windows 98 operating systems (<http://www.िवisit.com>). All you need to get started is an Internet account, a Windows based system that meets the minimum system requirements, and a web cam.

With iVisit you can:

- Place and receive live full-motion video conference calls with other iVisit users.

Getting Started with iVisit

- Insert the iBOT2 Installer CD.
- Once the iBOT2 Installer window has opened, click on the box next to "Install iVisit" and follow the prompts to complete the iVisit installation.
- When the iBOT2 Installer window reappears, click on the box next to Exit Setup.

To launch iVisit click on the Windows Start button then select Programs/iVisit/iVisit. To get iVisit help, click on the Windows Start button then select Programs/iVisit/FAQ.

Note: Currently iVisit does not display the entire video contents. We are working on this issue and the fix will be available soon on our web site (<http://www.orangemicro.com/softwareupdates.html>).

Microsoft NetMeeting

NetMeeting is an Internet communications solution providing you with basic Video Conferencing capabilities. All you need to get started is an Internet account, a Windows based computer that meets the minimum system requirements, and a video camera.

With NetMeeting you can:

- Place and receive live full-motion video conference calls with other NetMeeting users.

Getting Started with NetMeeting

NetMeeting is usually preinstalled on Windows Me, Windows 2000 and Windows XP based systems. To launch NetMeeting click on the Windows Start button then select Programs/Accessories/Communications/NetMeeting.

To Install NetMeeting in Windows

- Insert the iBOT2 Installer CD.
- Once the iBOT2 Installer window has opened, click on the box next to "Install Microsoft NetMeeting and follow the prompts to complete the Microsoft NetMeeting installation.
- When the iBOT2 Installer window reappears, click on the box next to Exit Setup.
- To preview video from your iBOT2 click on the Play/Pause button.
- For additional online help pull down the Windows Help menu.

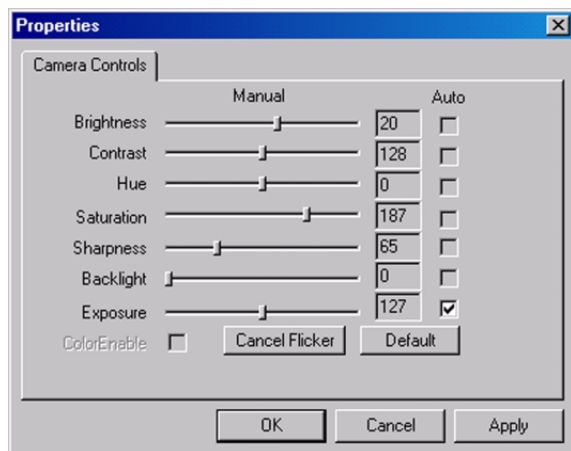


How to Adjust iBOT2 Color and Format Properties

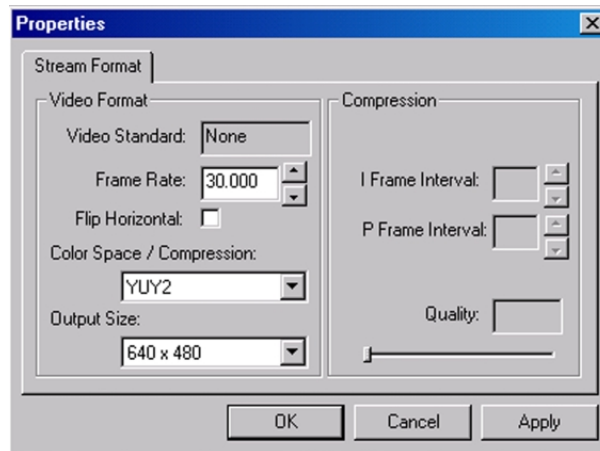
AMCAP

Launch the Amcap application by clicking on the Windows **Start**/Programs menu and select Orange Micro iBOT2 /Amcap. Drop down the Amcap Options menu and select:

- Video Capture Filter...
- Video Capture Pin



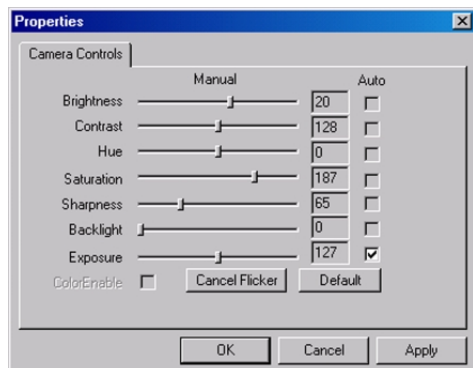
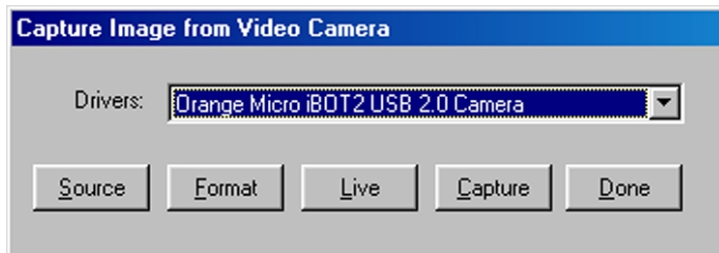
Video Capture Filter



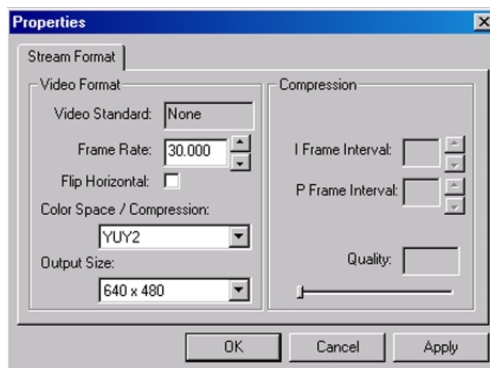
Video Capture Pin

PhotoImpression

Start PhotoImpression. Click on the Camera/Scanner button. Then click on the video camera icon and the “Capture Image from Video Camera” dialog will appear. Click on the Source button to display the Camera Controls dialog. Click on the Format button to display the Stream Format dialog.



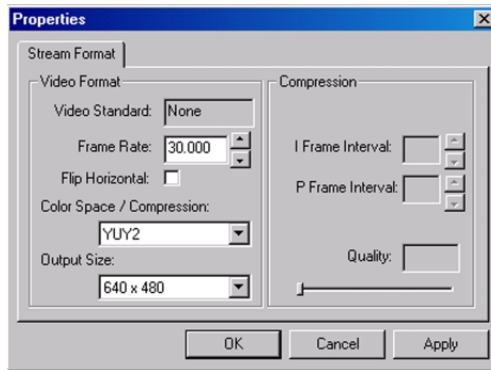
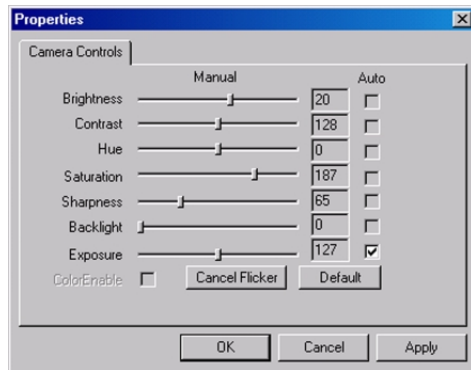
Camera Controls



Stream Format

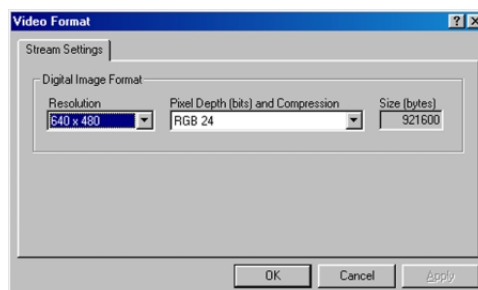
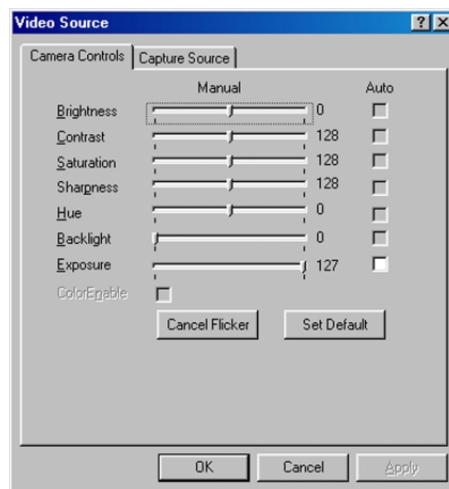
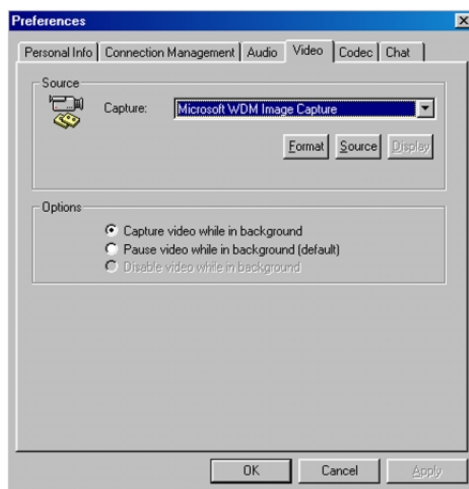
VideoImpression

Start PhotoImpression. Click on the New Project button. Then click on the Capture icon. The VideoImpression Capture window will appear. Click on the Source button to display the “Camera Controls” dialog. Click on the Format button to display the “Stream Format” dialog.



iVisit

Start iVisit. Click on the Windows Start button. Then select Programs/iVisit/iVisit. Click on the iVisit Settings/Preferences menu. Then click on the Video tab, below left. Click on the Source button, below left, to display the “Camera Controls” dialog, below right. Click on the Format button, below left, to display the “Stream Settings” dialog.




NetMeeting

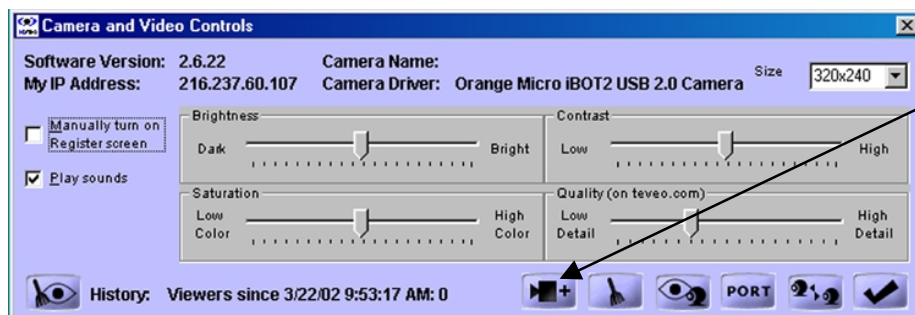
Click on the Windows Start button. Then select Programs/Accessories/Communications/NetMeeting. Click on the NetMeeting Play/Pause button to begin previewing video from the iBOT2. Click on the NetMeeting Tools/Options... menu item. Click on the Video tab, then the Source tab. The Orange Micro iBOT2 USB 2.0 Camera dialog will appear. The Device Settings and Camera Controls tabs in this dialog will allow you adjust the video camera properties.



TeVeo Suite

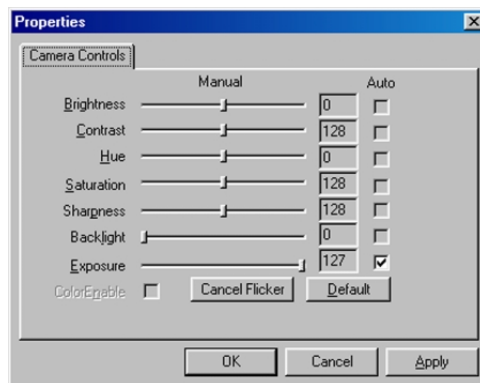
Click on the Windows Start button then select Programs/TeVeo/TeVeo VIDIo Suite. The VIDIo Suite window will appear. Click on the Live button to open a Live video window.

Click on the Camera Controls icon  at the bottom of the Live video window. The Camera and Video Controls window will appear.



Advanced Camera Controls icon

Click on the “Advanced Camera Controls” icon to display the “Camera Controls” dialog.



Frequently Asked Questions

Problem – With the iBOT2 I get video, but it appears way off center and the colors are off. Also the only available frame size is 256 x 240. What can I do to correct this?

Suggestion:

The iBOT2 requires a USB 2.0 port. These symptoms are typical of USB 1.1 operation. This is due to connecting the iBOT2 into a USB 1.1 port or failing to properly install the USB 2.0 drivers. If you do not have a USB 2.0 port, a low cost alternative is available here:

<http://www.orangemicro.com/LCusb2pci.html>

Problem – My Windows XP Device Manager looks different than the screenshot in the “Installing the iBOT2 Drivers” section.

Suggestion:

Windows XP may automatically install the Microsoft supplied USB 2.0 Enhanced Host Controller driver. As long as Windows XP Service Pack 1 is installed, these drivers will work fine.



Verify the Windows XP supplied USB 2.0 driver was updated to the Windows XP Service Pack 1 USB 2.0 driver or newer.

Double click on the USB Enhanced Host Controller, Then click on the Drivers tab. As of 11/02/02, the driver information below is most current for the Microsoft Enhanced Host Controller driver.

Driver Date: 6/1/2002

Driver Version: 5.1.2600.0

NON-ORANGE MICRO USB 2.0 HOST CONTROLLERS : If the USB Enhanced Host Controller Date and Version are not equal to or newer than the above driver information, you do not have the USB 2.0 driver from Service Pack 1 or newer installed. Select the Driver tab and click on Update Drivers to begin the USB 2.0 driver update.

Problem – My USB 2.0 host controller is not an OrangeUSB card. I am not getting streaming video from my iBOT2.

Suggestion:

The Orange Micro USB 2.0 drivers are compatible with all known USB 2.0 Host controllers. Install the Orange Micro USB 2.0 Host controller. Double click on the USB 2.0 Enhanced Host Controller in your Windows System Device Manager. Select the Driver tab and click on Update Drivers to begin the USB 2.0 driver update.

Problem – I purchased an iBOT2 and the video is fuzzy. What can I do?

Suggestion:

Rotate the blue part of the iBOT2 to the right or left until the video is clear and crisp.

Problem – I have an iBOT2 running under Windows XP. How can I resize the picture?

Suggestion:

The "AMCAP Options\Video Capture PIN" dialog allows you to adjust the picture size and fps.

Problem – I cannot find the NetMeeting command on the Communications Menu in Windows XP.

Suggestion:

Ref: <http://support.microsoft.com/support/kb/articles/Q304/8/01.ASP>

This issue can occur because the NetMeeting functionality has been combined with the Windows Messenger Service in Windows XP. To resolve this issue, use the Windows Messenger Service to communicate with others over the Internet or on your intranet.

To start Windows Messenger Service:

Click Start on the taskbar. Point to Accessories, point to Communications, and then click Windows Messenger Service.

To work around this issue:

Run NetMeeting manually. Click Start on the taskbar, and then click Run. In the Open box, type conf.exe, and then press ENTER.

Problem – I am a software developer and I am interested in developing a custom application for the iBOT2 camera. Does Orange Micro have a developers kit for the iBOT2 camera?

Suggestion:

Microsoft® DirectShow® is the interface that most developers use to capture video from DVCAMs and Desktop Cameras, including USB and FireWire Web Cams. We have no developer kit for this purpose. All the required information is available from Microsoft.

Microsoft® DirectShow®

<http://www.microsoft.com/DIRECTX/dxm/help/ds/default.htm>

Problem – Why is using a USB 2.0 Web Cam better than a USB 1.1 Web Cam?

Suggestion:

The main benefit of using the iBOT2 is that the video coming from the iBOT2 is uncompressed. Other cameras compress video before it leaves the camera. Then the program that receives the video must decompress and then recompress the video using a different type of compression before the video is usable. This technique tends to dramatically degrade the quality and color of the video. Because the iBOT2 sends uncompressed video the program does not have to uncompress and then recompress the video before it can be used. It will simply take the uncompressed video from the iBOT2 and compress it using the appropriate compression. This will both allow for better quality video along with alleviating the demand on the CPU to process more frames.

When using the iBOT2 for video editing there are a few system requirements you should keep in mind. The first thing is the transfer rate. This number will vary depending on the resolution and frame rate you capture. The formula used to determine the transfer rate is "horizontal resolution x vertical resolution x 2 x frames per second = transfer rate". If you capture 640x480 at 30 Frames/sec you simply multiply 640x480x2x30, which equals 18,432,000 Bytes/Sec or 18MB/s. If you intended to capture 640x480 at 30 Frames/sec you need a hard drive that can sustain a transfer rate of 18 MB/s.

There are other factors to keep in mind other than hard drive speed. To properly perform video editing on a PC using the iBOT2 you will need at least a Pentium 233MMX, 64 MB of RAM and a defragmented hard drive.

Additional iBOT2 Workflow Recommendations and Known Issues

Optimize your System

If you do not optimize your system you may get dropped audio or video frames. This can cause choppy sound or video that does not appear smooth.

Run Disk Defragmenter on your hard disk. With all applications closed, click on the Windows Start menu and select Start / Programs / Accessories / Systems Tools / Disk Defragmenter.

Enable DMA for IDE hard disks. In the Windows System/Device Manager double click on Disk Drives. Then double click on the icon labeled Generic IDE Disk. Select the Settings tab and click on the DMA box. Close all windows and restart the Windows operating system. Not all hard drives support DMA. If any problems result due to this procedure, restart Windows in safe mode and remove the check on the DMA box.

Appendix A

Optional Hardware

The following optional OrangeLink hardware accessories are available from Orange Micro:

FireWire cable **Part# 70CAB13942**

4.5 meter (15 feet) 6-pin to 6-pin

FireWire cable **Part# 70CAB13943**

4.5 meter (15 feet) 6-pin to 4-pin

USB 2.0 Certified cable **Part# 70CAB90033**

4.5 meter (15 feet)

FireWire Repeater **Part# 70HTL00020**

Allows an additional 4.5 meter extension for FireWire devices. Includes a 4.5 meter (15 foot) 6-pin to 6-pin cable.

FireWire Hub **Part# 70HTL00030**

Connects up to 8 devices. Also provides an additional 4.5 meter extension, and an enhanced 12 volts of power for FireWire peripherals.

USB 2.0 Hub **Part# 70USB90030**

Connects up to 4 devices. Also provides an additional 4.5 meter extension.

FireWire PCI Board **Part# 70HTL13943**

Add 3 FireWire ports to your PCI based Mac or PC.

USB 2.0 Hi-Speed PCI Board **Part# 70USB90010**

Add 5 USB 2.0 Hi-Speed ports to your PCI based Mac or PC.

FireWire PC Card **Part# 70HTL00040**

Add 2 FireWire ports to your Mac or PC Laptop.

USB 2.0 Hi-Speed PC Card **Part# 70USB90020**

Add 4 USB 2.0 Hi-Speed ports to your Mac or PC Laptop.

USB 2.0 FireWire PCI Board **Part# 70HTL00110**

Add 3 FireWire and 4 USB 2.0 Hi-Speed port to your PCI based Mac or PC.

FireWire/Ethernet PCI Board **Part# 70HTL00090**

Add 2 FireWire ports and Ethernet support to your PCI based PC Only.

Optional OrangeLink FireWire PC Card Power Supply

Avoid buying a FireWire Hub for the purpose of supplying power to the FireWire Bus. Available from:

<http://www.1394firestation.com/>

For information about the USB Implementers Forum, Inc. and many other related products can be found at the following URL:

<http://www.usb.org/>

Appendix B

Specifications

General Features:

- 480 Mb/sec. USB 2.0 High Speed compatible
- Fully compatible with Windows
- Non-compressed full-motion digital video at rates of 30 Frames/sec @ 640 x 480 depending on your system configuration
- 1/3" Color CMOS Image Sensor
- 60 degree angle of view
- Effective Pixels: 664 x 492
- Frame size up to 640 x 480
- Scanning System: Progressive scan / Interlaced scan
- Currently supports YUY2, I420 and RGB 24-bit formats
- Millions of colors (24 bit)
- Supports Plug-and-Play specification
- Tripod Mount

Cable / Connector:

- 6 foot attached iBOT2 cable with a Type A connector

Software:

- Windows drivers for the USB 2.0 Host Controller
- Windows drivers for the iBOT2 Web Cam

Appendix C

Warranty Information

LIMITED WARRANTY

Every Orange Micro product is fully tested and checked for quality prior to shipment. It is warranted to be free from defects in materials and workmanship for a period of one (1) year from date of purchase. During that time period, Orange Micro Inc. will, at no charge to the purchaser of record, repair or replace the defective unit returned to the Customer Service Department in accordance with the following instructions:

NOTE: DO NOT return the Orange Micro product to Orange Micro Inc. until you have received a Return Material Authorization (RMA) Number. Customers outside the United States should contact the Orange Micro distributor in that country and request service.

1. Phone the Orange Micro Customer Service Department at 714 779-2772. Customer Service hours of operation are between 8AM and 4PM PST. Customer Service lines are closed from 12PM to 1PM PST for lunch. Obtain a Return Material Authorization (RMA) number.
2. Provide Orange Micro, Inc. with Model, Serial Number, Proof of Purchase, Return Address, and preferred return shipping method. Enclose a clear description of the problem experienced and any sample printouts showing the problem, if possible.
3. Ship in the original carton or securely packed in a cardboard carton with at least two inches of cushioned packing material on all sides. Mark the package "FRAGILE" and ship via UPS, Parcel Post, or Air Freight, insured and prepaid.

NOTE: DO NOT SEND COLLECT - collect shipments will be refused and returned to sender.

Orange Micro, Inc. disclaims any liability to users of the Orange Micro product for consequential damages of any kind arising from or connected with the use of the Orange Micro product.

This warranty is void in cases of misuse, abuse, abnormal conditions of operations or attempts to alter or modify the function of a part or assembly.

This limited warranty is in lieu of all other warranties expressed or implied, and no representative or other person is authorized to represent or assume for Orange Micro, Inc. any warranty liability beyond that set forth herein.

This warranty gives you specific legal rights, and you may also have additional rights, which vary, from state to state. The warranty expressed herein applies to the Orange Micro product sold and used in the United States of America.

FCC Class B Information

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio/TV Interference Problems. This booklet is available from the US Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4

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